



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,153	12/07/2001	Irwin Gerszberg	003493.00513	1367
22907	7590	05/27/2004	EXAMINER	
BANNER & WITCOFF 1001 G STREET N W SUITE 1100 WASHINGTON, DC 20001			YAO, KWANG BIN	
			ART UNIT	PAPER NUMBER
			2667	3

DATE MAILED: 05/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/005,153

Applicant(s)

GERSZBERG ET AL.

Examiner

Kwang B. Yao

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-19, 26-28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-14, 18-25 of U.S. Patent No. 6,359,881. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application's claims merely broaden the scope of the patented claims by not claiming some elements. The following is the comparison between the patented claims and the claims in

Art Unit: 2667

the instant application. U.S. Patent No. 6,359,881 claims the following limitations: 1. A communications architecture comprising: at least one customer premises equipment interface device coupled to a digital subscriber line modem, the interface device being connected to one end of a single twisted cable pair, a facilities management platform capable of separating voice signals from data packet signals and connected to another end of said single twisted cable pair, the facilities management platform for interfacing with a plurality of different networks including a packet data network via a digital optical ring network, a router within the facilities management platform for transmitting data packet signals received from customer premises equipment to a packet data communications network simultaneously with transmitting voice signals received from customer premises equipment to a public switched telephone network, a digital loop carrier within the facilities management platform capable of transmitting the voice signals to the public switched telephone network and receiving voice signals from the public switched telephone network; and a network server platform coupled to said facilities management platform via said digital optical ring network for providing system management to the facilities management platform. 2. The communications architecture of claim 1 wherein said at least one customer premises equipment device comprises a multiplexer for multiplexing voice and data signals for simultaneous transmission over said single twisted cable pair to said facilities management platform. 3. The communications architecture of claim 2, wherein the multiplexed voice and data signals are transmitted and received by the customer premises equipment interface device by a spread spectrum multiplexing scheme. 4. The communications architecture of claim 2, wherein the multiplexed voice and data signals are transmitted and

Art Unit: 2667

received by the customer premises equipment interface device by a time division multiplexing scheme. 5. The communications architecture of claim 2, wherein the multiplexed voice and data signals are transmitted and received by the customer premises equipment interface device by a frequency division multiplexing scheme. 6. The communications architecture of claim 2, wherein the multiplexed voice and data signals are transmitted and received by the customer premises equipment interface device by an asynchronous multiplexing scheme. 7. The communications architecture of claim 2, wherein the multiplexed voice and data signals are transmitted and received by the customer premises equipment interface device by a synchronous multiplexing scheme. 8. The communications architecture of claim 1, the customer premises equipment interface being electronically connected to the facilities management platform by digital subscriber line modems including said digital subscriber line modem of said customer premises interface device. 9. The communications architecture of claim 1 wherein said digital optical ring network comprises a synchronous optical network. 10. The communications architecture of claim 1 further comprising at least one analog telephone connected to the customer premises interface device. 11. The communications architecture of claim 1 further comprising at least one digital telephone connected to the customer premises interface device. 12. The communications architecture of claim 1 further comprising at least one video telephone connected to the customer premises interface device. 13. The communications architecture of claim 1 further comprising at least one facsimile machine connected to the customer premises interface device. 14. The communications architecture of claim 1 further comprising at least one personal computer telephone connected to the customer premises interface device. 18, A communications architecture comprising: at least one customer premises equipment interface

Art Unit: 2667

device coupled to a digital subscriber line modem, the interface device being connected to one end of a single twisted cable pair, and being capable of multiplexing and demultiplexing signals, a main distributing frame connected to another end of said single twisted cable pair for terminating a plurality of twisted cable pairs, the main distributing frame providing cross connection between said customer premises interface device and a facilities management platform, the facilities management platform capable of separating voice signals from data packet signals and connected to the other end of said single twisted cable pair via said main distributing frame, the facilities management platform for interfacing with a plurality of different networks including a packet data network and a public switched telephone network via a digital optical ring network, a router within the facilities management platform for transmitting data packet signals received from customer premises equipment to a packet data communications network simultaneously with transmitting voice signals received from customer premises equipment to said public switched telephone network, a digital loop carrier within the facilities management platform capable of transmitting the voice signals to the public switched telephone network and receiving voice signals from the public switched telephone network; and a network server platform coupled to said facilities management platform via said digital optical ring network for providing system management to the facilities management platform; 19. The communications architecture of claim 18 wherein the public switched telephone network comprises an out of band signaling network; 20. The communications architecture of claim 18, the network server platform for further launching network applications for use by other elements of said architecture; 21. The communications architecture of claim 18 wherein the plurality of different networks further comprises a private switched telephone network; 22. The

Art Unit: 2667

communications network architecture of claim 18 wherein said facilities management platform comprises an element of an interexchange carrier; 23. The communication architecture of claim 18, wherein the facilities management platform further comprises: at least one line card; and means for directly routing analog voice signals to the at least one line card. 24. The communication architecture of claim 23, wherein the at least one line card is configured to convert the analog voice signals to digital format. 25. The communication architecture of claim 18, wherein the router is configured to transmit the data packet signals and the voice signals over a high speed backbone network. The instant application claims the following limitations: 1. A communications architecture comprising: at least one customer premises equipment interface device coupled to a digital subscriber line modem, the interface device being connected to one end of a single coaxial cable; a facilities management platform arranged to provide integrated voice and data signals from customer premises equipment to at least one network; a main distributing frame connected to another end of the single coaxial cable to terminate a plurality of different telecommunication wirings, the main distributing frame to provide a connection between the customer premises equipment interface device and the facilities management platform; a router within the facilities management platform for transmitting integrated voice and data packet signals from customer premises equipment to a network of the at least one network simultaneously with transmitting voice signals received from customer premises equipment to a public switched telephone network; and a network server platform coupled to said facilities management platform via the packet data communications network for providing system management to the facilities management platform; 2. The communications architecture of claim 1, wherein the at least one network includes the Internet. 3. The communications

Art Unit: 2667

architecture of claim 1, wherein the at least one customer premises equipment device comprises a multiplexer for multiplexing voice and data signals for simultaneous transmission over the coaxial cable, which is part of a cable network plant, to the facilities management platform. 4. The communications architecture of claim 3, wherein the multiplexed voice and data signals are transmitted and received by the customer premises equipment interface device by a spread spectrum multiplexing scheme. 5. The communications architecture of claim 3, wherein the multiplexed voice and data signals are transmitted and received by the customer premises equipment interface device by a time division multiplexing scheme. 6. The communications architecture of claim 3, wherein the multiplexed voice and data signals are transmitted and received by the customer premises equipment interface device by a frequency division multiplexing scheme. 7. The communications architecture of claim 3, wherein the multiplexed voice and data signals are transmitted and received by the customer premises equipment interface device by an asynchronous multiplexing scheme. 8. The communications architecture of claim 1, wherein the multiplexed voice and data signals are transmitted and received by the customer premises equipment interface device by a synchronous multiplexing scheme. 9. The communications architecture of claim 1, further comprising at least one analog telephone connected to the customer premises interface device. 10. The communications architecture of claim 1, further comprising at least one digital telephone connected to the customer premises interface device. 11. The communications architecture of claim 1, further comprising at least one video telephone connected to the customer premises interface device. 12. The communications architecture of claim 1, further comprising at least one facsimile machine connected to the customer premises interface device. 13. The communications architecture of

Art Unit: 2667

claim 1, further comprising at least one personal computer telephone connected to the customer premises interface device. 14. The communications architecture of claim 1, wherein the customer premises equipment interface device is electronically connected to the facilities management platform by digital subscriber line modems including said digital subscriber line modem of said customer premises interface device. 15. The communications architecture of claim 1, wherein the at least one network includes a broadband optical network. 16. The communications architecture of claim 1, wherein the public switched telephone network comprises an out of band signaling network; 17. The communications architecture of claim 1, wherein the network server platform is further arranged to launch network applications for use by other elements of the architecture; 18. The communications architecture of claim 1, wherein the at least one network further comprises a private switched telephone network. 19. The communications network architecture of claim 1, wherein said facilities management platform comprises an element of an interexchange carrier; 26. The communication architecture of claim 1, wherein the facilities management platform further comprises: at least one line card; and means for directly routing analog voice signals to the at least one line card; 27. The communication architecture of claim 26, wherein the at least one line card is configured to convert the analog voice signals to digital format for transmission over a network. 28. The communication architecture of claim 1, wherein the router is configured to transmit the data packet signals and the voice signals over a high speed backbone network. At least one of the following elements are recited in the patent claims but not in the instant application: the facilities management platform capable of separating voice signals from data packet signals and connected to the other end of said single twisted cable pair via said main distributing frame, the facilities

management platform for interfacing with a plurality of different networks including a packet data network and a public switched telephone network via a digital optical ring network. The application's claims are nearly identical in every other respect to the patent claims. Therefore, the application's claims are simply broader version of the patented claims. It is the examiner's position that broadening the patented claims by not claiming the above elements of the patented claims would have been obvious to one of the ordinary skill in the art in view of the patented claims. It is important to note that the instant application is a continuation of the application which yielded the patent (U.S. Patent No. 6,359,881) used herein as the basis for the obviousness type of double patenting rejection. The application is attempting to broaden the parent application's claims by eliminating some the claimed elements in the continuation at issue here.

3. Claims 20-25,29-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 26-32 of U.S. Patent No. 6,359,881 in view of McHale et al. (US 6,160,843).

The instant application claims the following limitations: 20. In a communication architecture comprising at least one customer premises equipment interface device coupled to a digital subscriber line modem, the interface device being connected to one end of a single coaxial cable, which is part of a cable network plant, a facilities management platform capable of separating voice signals from data packet signals and connected to another end of the single coaxial cable, the facilities management platform for interfacing with at least one network, a router within the facilities management platform for transmitting data packet signals received from customer premises equipment to a network of the at least one network simultaneously with transmitting voice signals received from customer premises equipment to a public switched

telephone network, and a network server platform coupled to said facilities management platform via one of the networks of the at least one network for providing system management to the facilities management platform, a method of providing simultaneous communications over said single coaxial cable comprising the steps of: receiving a request for one of a voice or packet data service over said single coaxial cable at one of said facilities management platform or said customer premises interface device, permitting said one service over said single coaxial cable pair, receiving a second request for one of a voice or packet data service over said single coaxial cable at one of said facilities management platform or said customer premises interface device and multiplexing signals associated with said first and second services over said single coaxial cable resulting in both said services being received simultaneously by at least one user of said architecture, said signals being intelligently multiplexed such that an available bandwidth of said single twisted pair is maximized; 21. The method of claim 20, wherein the at least one network includes the Internet; 22. The method of claim 20, wherein the at least one network includes a broad band optical network; 23. The method as recited in claim 20, wherein the services comprise a voice service and a packet data service permitting a user to speak to another party and view an Internet web page on a personal computer display at the same time; 24. The method as recited in claim 20, further comprising the steps of receiving a third request for service over said single twisted cable pair and multiplexing signals associated with said first, second and third services over the coaxial cable resulting in said service being received simultaneously by at least one user of said architecture; 25. The method as recited in claim 20, wherein said first request for service comprises a request for an Internet packet data service and said second request for service comprises a request for a video service; 29; The method of claim 20, further

Art Unit: 2667

comprising: directly routing analog voice signals to at least one line card within the facilities management platform for transmission over a network when a digital data link fails; 30. The method of claim 29, further comprising: converting, by the at least one line card, of analog voice signals to digital format for transmission over the network; 31. The method of claim 20, further comprising: transmitting, via the router, the data packet signals and the voice signals over a high speed backbone network.

U.S. Patent No. 6,359,881 claims the following limitations: 26. In a communication architecture comprising at least one customer premises equipment interface device coupled to a digital subscriber line modem, the interface device being connected to one end of a single twisted cable pair, a facilities management platform capable of separating voice signals from data packet signals and connected to another end of said single twisted cable pair, the facilities management platform for interfacing with a plurality of different networks including a packet data network via a digital optical ring network, a router within the facilities management platform for transmitting data packet signals received from customer premises equipment to a packet data communications network simultaneously with transmitting voice signals received from customer premises equipment to a public switched telephone network, and a network server platform coupled to said facilities management platform via said digital optical ring network for providing system management to the facilities management platform, a method of providing simultaneous communications over said single twisted cable pair comprising the steps of receiving a request for one of a voice or packet data service over said single twisted cable pair at one of said facilities management platform or said customer premises interface device, permitting said one service over said single twisted cable pair, receiving a second request for one of a voice or packet

Art Unit: 2667

data service over said single twisted cable pair at one of said facilities management platform or said customer premises interface device and multiplexing signals associated with said first and second services over said single twisted cable pair resulting in both said services being received simultaneously by at least one user of said architecture, said signals being intelligently multiplexed such that an available bandwidth of said single twisted pair is maximized; 27. A method as recited in claim 26 wherein said services comprise a voice service and a packet data service permitting a user to speak to another party and view an Internet web page on a personal computer display at the same time. 28. A method as recited in claim 26 further comprising the steps of receiving a third request for service over said single twisted cable pair and multiplexing signals associated with said first, second and third services over said single twisted cable pair resulting in said service being received simultaneously by at least one user of said architecture. 29. A method as recited in claim 26 wherein said first request for service comprises a request for an Internet packet data service and said second request for service comprises a request for a video service; 30. The method of claim 26, further comprising: directly routing analog voice signals to at least one line card within the facilities management platform for transmission over a network when a digital data link fails; 31. The method of claim 30, further comprising: converting, by the at least one line card, of analog voice signals to digital format for transmission over the network; 32. The method of claim 26, further comprising: transmitting, via the router, the data packet signals and the voice signals over a high speed backbone network. The following elements are recited in the patent claims but not in the instant application: a single twisted cable pair. The instant application recites the claimed limitations of coaxial cable rather than the twisted cable pair. McHale et al. (US 6,160,843) discloses a communication system comprising

Art Unit: 2667

the following features: replacing the exiting twisted pair wiring with coaxial cables. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of U.S. Patent No. 6,359,881, by using the features, as taught by McHale et al. (US 6,160,843), in order to provide higher bandwidth data service and greater connectivity and access to information. See McHale et al., column 1, lines 26-35.

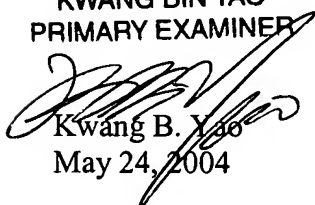
Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang B. Yao whose telephone number is 703-308-7583. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 703-305-4378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KWANG BIN YAO
PRIMARY EXAMINER



Kwang B. Yao
May 24, 2004